WHAT IS CLAIMED IS:

sub A1

1. A semiconductor laser device having a quantum well active layer disposed between a pair of cladding layers, and an optical guide layer disposed between at least one of the cladding layers and the quantum well active layer,

wherein an undoped spacer layer is provided between said optical guide layer and said at least one of the cladding layers.

2. A semiconductor laser device according to claim 1, wherein said spacer layer is formed between the optical guide layer and a p-type cladding layer, and has a thickness of 5 nm or more but below 10 nm.

3. A semiconductor laser device according to claim 2, wherein said p-type cladding layer has a carrier concentration in a range of from 8×10^{17} cm^{-3} to 5×10^{18} cm^{-3}.

SUB B2

4. A semiconductor laser device according to claim 2, wherein said spacer layer has a p-type electrical conductivity, and a carrier concentration at an interface between said spacer layer and said optical guide layer is more than 5×10^{16} cm^{-3} and less than 5×10^{17} cm^{-3}.

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5. A semiconductor laser device according to claim 2, wherein said spacer layer has a composition identical to that of said p-type cladding layer or is larger than said p-type cladding layer in a band gap.

Sub B2

6. A method of manufacturing a semiconductor laser device, comprising the steps of sequentially forming, on an n-type substrate, an n-type doped buffer layer, an n-type doped cladding layer, a first undoped optical guide layer, an undoped quantum well active layer, a second undoped optical guide layer, p-type doped cladding layer, and a p-type doped cap layer by a vapor phase growth method, characterized by:

forming an undoped spacer layer between said second undoped optical guide layer and said p-type doped cladding layer.

7. A method of manufacturing a semiconductor laser device according to claim 6, wherein said undoped spacer layer is formed in a thickness of 5 nm or more but below 10 nm.

8. A method of manufacturing a semiconductor laser device according to claim 6, wherein each of said layers is formed by a MOCVD method and under a condition in which a

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growth temperature is from 650°C to 800°C both inclusive, and a ratio of a feed rate of a group V source to that of a group III source is from 50 to 200 both inclusive.

add a2